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ABSTRACT

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LEARNING RESEARCH AND DEVELOPMENT CENTER

1976/1

SOCIAL OUTCOMES OF THE SCHOOLING PROCESS

DANIEL BAR-TAL

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1975

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Abstract

Social psychological research in education has focused mainly on the investigation of those variables that may influence academic achievement. However, the school functions as an agent of socialization and, therefore, it seems reasonable to suggest that social reactions should also be investigated as an outcome of the schooling process. The present paper proposes a taxonomy of social outcomes of the schooling process as a possible framework within which such an investigation can be carried out.

SOCIAL OUTCOMES OF THE SCHOOLING PROCESS

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Within recent years a growing number of social psychologists have become interested in educational problems. The social psychology of education is becoming recognized as a distinctive subfield within both psychology and education. An indication of how this area has grown is the fact that several books concerned with social psychology and education have recently been written and edited (e.g., Backman & Secord, 1968; Charters & Gage, 1963; Guskin & Guskin, 1970; Johnson, 1970; Miles & Charters, 1970; Yee, 1971).

In view of this development, the present paper has two major goals. The first is to briefly review the perspectives utilized by social psychologists in their investigations of the social processes in the school. Specifically, it will be argued in the review that even though researchers used different approaches in their investigations, most of the studies were implicitly or explicitly concerned with examining possible ways to improve academic achievement. However, it seems likely that in schools, children acquire social reactions in addition to academic skills. There is also a need, therefore, to investigate these reactions as the social outcomes of the schooling process. Thus, the second goal of this paper is to propose a framework which will enable social psychologists to define, organize, and analyze various types of social outcomes of the schooling process.

Perspectives in Social Psychology of Education

Past contributions of social psychology of education can be classified according to the various theoretical perspectives employed. It is possible to identify four distinct, though not mutually exclusive, perspectives utilized by social psychologists of education: small groups, individual psychology, role theory, and organizational approach.

The first perspective derives from research using the group as the unit of analysis (e.g., Trow, Zander, Morse, & Jenkins, 1950). Viewing the students and the teacher in the classroom as a group, researchers have applied principles of group research to classroom situations. The social psychologists who use this approach are concerned with investigating the formation of and changes in the structures and functions of the school class as a group. They investigate the norms that govern classroom behavior and the goals which the group attempts to achieve. In addition, they are also concerned with investigating group processes which modify an individual student's behavior. Recognizing the fact that the classroom group behavior has a significant impact on student achievement, researchers have focused on the influence on academic performance of such variables as type of group leadership, cohesiveness of the class, status differentiation within the classroom group, and social climate in the classroom. Books by Bany and Johnson (1964) and Schmuck and Schmuck (1971) present extensive reviews of these and other possible contributions of the group dynamics theory to education.

A second direction of research in the social psychology of education derives from individual psychology. This approach takes as its major point of reference structures and processes which characterize the functioning of individuals (e.g., Brophy & Good, 1974). The basic assumption of this approach is that because a large portion of a teacher's behavior is directed toward the student as individual, and because each student is evaluated individually, the student should be the focus of investigation.

Work in this area has been directed toward understanding the behavior of teachers and students as a function of their attitudes, motivations, expectations, beliefs, and values in social situations. In particular, the focus of this research has been on the effect of these individual characteristics on students' academic performance. Also, researchers taking an individual approach have investigated the effects of such variables as an individual's sex, socioeconomic status, race, or intelligence both on student interaction with teachers and on academic achievement (e.g., Rosenthal & Jacobson, 1968).

Role theory provides a third perspective which has been utilized in the social psychology of education. Role theorists view the school as a social system with a concomitant social structure. In such a social system, individuals occupy certain positions, and social behavior is analyzed by noting how a person's behavior derives and is related to his or her social role. Role theory investigators have looked beyond the particular characteristics of individuals to see how their behavior is affected by societal expectations and by the individuals' own interpretations of the obligations and privileges of their roles (e.g., Amidon & Flanders, 1963; Getzels, 1963). In particular, this approach has focused on the role of the teacher (e.g., Biddle, Rosencranz, & Rankin, 1961) and the role of the pupil (e.g., Jackson, 1968). Role theory assumes that the academic performance of the pupil depends on what others (teachers, parents, peers) demand of him, on what he believes about the requirements of his role as a pupil, and on the manner in which the teacher enacts his/her role.

The fourth direction of research in the social psychology of education derives from the organizational approach. This perspective views the school as a bureaucratic organization (e.g., Bidwell, 1965; Schmuck & Miles, 1971). The basic assumption of this approach is that the behavior of individuals is greatly affected by the structure of the organization.

Thus, in order to understand the academic performance of students, there is a need to investigate such characteristics as the implicit and explicit goals of the organization.

On the basis of this, it is possible to note that although social psychological research in education has utilized different theoretical approaches, the primary concern has been academic performance in the classroom. That is, social psychological variables such as patterns of interaction, styles of leadership, personality of the teacher, relationship between teacher and pupil, and so forth have been investigated in order to improve the effectiveness of the teaching/learning process. However, if the school is to be viewed as a socializing agency where children spend thousands of hours interacting with their peers and teachers, then it seems reasonable to propose that social reactions also deserve to be treated as dependent variables in the sense of investigating them as outcomes of the schooling process.

Social Outcomes of the Schooling Process

Social outcomes are defined in this paper as those social reactions which are learned or modified by the schooling process. Social reactions, according to Allport's (1937/1968) definition, consist of thoughts, feelings, and behavior influenced by the actual, imagined, or implied presence of others. Children acquire social reactions merely by being in a school for many hours during a day participating in a variety of school activities. It is, however, recognized that because schools differ in many characteristics such as curricula, physical structure, use of materials, and philosophy of education, children learn different social reactions in different schools.

Theoretical Basis of Social Outcomes

The central assumption of this paper, that schooling processes affect children's social reactions, is based on Mischel's (1968, 1973)

thesis concerning the lack of stability of personality dispositions. Until recently, it has been widely believed that personality dispositions such as habits, basic attitudes, or beliefs, traits and values, are stable across situations and time (e.g., Allport 1937/1968). In contrast, Mischel (1968) reviews the extensive evidence that individuals' social reactions are greatly affected by the conditions of the situation and can be modified by numerous environmental changes. He proposes a cognitive social learning approach which "shifts the unit of study from global traits inferred from behavior signs to the individual's cognitive activities and behavior patterns, studied in relation to the specific conditions that evoke, maintain, and modify them and which they, in turn, change" (Mischel, 1973, p. 265). According to this thesis, behavior is more environment specific than it was thought before, and "a person will behave consistently across situations only to the extent that similar behavior leads, or is expected to lead, to similar consequences across those conditions" (Mischel, 1971, p. 74).

This position recognizes the possibility that the school, as an environment where children spend much of their time, may have a profound effect on students' social reactions. Mischel (1968) specifically pointed to such a possibility in suggesting that when an environment responds to individuals' behavior consistently for a long time, then individuals acquire relatively stable patterns of reactions.

Although the schooling process may have an important impact on children's social reactions, it is further recognized that in their later years of life, other environments may continue to shape individuals' social reactions. It is nevertheless assumed that the schooling process leaves its signs for many years to come, and any understanding of human social reactions requires an investigation of the impact the schooling process has had on individuals.

A number of educators and social scientists have recognized the importance of investigating social outcomes of the schooling process.

For example, Havighurst (1953) recognized in his early writings the fact that the "school becomes a place where they [children] also learn the task of social development" (p. 25). According to Havighurst, the child learns the following in school: (a) to get along with peers, (b) sex roles, (c) attitudes toward self, (d) concepts about the world, (e) morality and values, (f) independence, and (g) attitudes toward other people and institutions. In general, Havighurst pointed out that children learn societal values and skills in school which are required in order to fulfill specific roles in the society. Parsons (1959) also recognized that in school children learn "moral" skills in addition to cognitive skills. According to Parsons, the classroom must be viewed as an agency of socialization where children are trained to adjust to social requirements. In the same vein, Himmelweit and Swift (1969) noted that:

> Little consideration is given to the contribution that the school makes by its values, its learning opportunities and teacher-child relationship--school is not seen as an active socializing agent exerting an effect independent of that of the home. (p. 155)

They conducted one of the few studies which explicitly attempted to assess the effect of schooling on students' social reactions. The research, however, was limited to the investigation of school influence upon job aspirations. Their results showed:

> That school rather than home affected the individual's subsequent occupational history, job level, and aspirations. Moreover, his evaluation of his own career achievements was determined far more by reference to the achievement of his classmates than to those of his family. (pp. 157-158)

Similarly, Minuchin, Biber, Shapiro, and Zimiles (1969) conducted an extensive investigation of the psychological impact of schooling. Although the researchers decided upon social measures in an unsystematic way, their study, which compared the influence of different school environments, showed that "the schools affected the lives and functioning

of the children in ways that were pervasive and perhaps profound" (p. 390). Moreover, it was found that children in different schools differed more in terms of social outcomes than in academic performance. The environment of the school had an impact on the self-perception of children, their attitudes, and the learning and performance of their roles. However, the authors noted that:

> The potency of the school's orientation in affecting the children was a function of two conditions: the orientation of the home and its interaction with school influence; and the extent to which the school operated as a total integrated environment. (p. 391)

Problems in the Study of the Social Outcomes of the Schooling Process

Despite the evidence that the schooling process shapes social reactions, comparatively little research has been done in elucidating them. As Himmelweit and Swift (1969) stated:

> Few measures have been developed for understanding how, why, and with what effect the school seeks to influence behavior and outlook. The tendency appears to be toward collection of measures of the child's liking for and adjustment to school, his examination records, leaving age, and ratings of his behavior by peers and teachers. (p. 155)

The fact that the study of social outcomes of the schooling process has been a neglected area in social psychology of education can be explained in several ways. One reason for this neglect is that it has been very difficult to assess the social outcomes of the schooling process that are uniquely a product of the school. The child spends much time with family and peers, and no one can deny that these agents of socialization also have a profound influence on the social development of the child. Thus, scientists have difficulty distinguishing between those social outcomes which are a result of the schooling experience and those which are acquired in other settings.

A second reason for this neglect is the problem of defining and measuring schooling and classroom processes as independent variables. School is a complex environment, and researchers have difficulty deciding what variables might have impact on social reactions.

Another reason for disregarding social outcomes of the schooling process is the fact that students are rarely evaluated in a formal manner on the basis of social outcomes. Although a few curricula or programs that teach a child affective behavior exist, and some schools have defined affective objectives for schooling, schools do not place high value on any specific social reactions, at least not when compared to the high value placed on academic achievement.

A fourth problem has been the lack of adequate instruments for measuring social reactions. For each particular social reaction, there are different instruments, and many of them do not satisfy the required criteria of validity and reliability. The existence of many differing instruments partially derives from the fact that social psychologists disagree upon the definition of certain social reactions. Thus, for example, independent behavior is defined in several different ways (Hartup, 1963) and, as a result, has been measured with different instruments.

Finally, there is disagreement among educators and social psychologists about the scope of the definition of social outcomes. Some scientists include emotional reactions, cognitive responses, or personality characteristics, while others limit the definition of social outcomes to affective reactions. There have been attempts to define the scope of social outcomes of the schooling process through classifying them into differential categories (e.g., Hoepfner, Henenway, DeMuth, Tenopyr, Granville, Petrosko, Krakower, Silberstein, & Nadeau, 1972; Walter, 1973). However, these attempts at classification were based more on intuitive knowledge than on theoretical, social psychological bases. That is, types of social outcomes are not distinguished theoretically, or methodologically,

and, as a result, the scope of each category is relatively unclear and undifferentiated.

In summary, social scientists and educators have recognized the importance of studying social outcomes of schooling. However, for the reasons previously enumerated, the study of social outcomes has been relatively neglected. The next section suggests a framework to overcome some of the previously stated difficulties of the investigation of social outcomes. Specifically, in the following pages I will attempt to define the scope of social outcomes and classify them on the basis of systematic social psychological criteria. A classification of this type could stimulate further research by providing a proper framework for understanding and study of social outcomes of the schooling process. It is recognized that many problems of investigating social outcomes remain unsolved and should be the subjects of future research.

Taxonomy of Social Outcomes

Theoretical Overview

In this part of the paper, an attempt will be made to construct a taxonomy of social outcomes of the schooling process. The suggested taxonomy consists of discriminable and measurable categories for classifying those social outcomes.

It is proposed that the taxonomy of social outcomes of the schooling process include two major, though not mutually exclusive, categories. Each major category is further divided into three subcategories. The first major category classifies social outcomes on the basis of the type of social reaction and consists of the following three subcategories: (a) beliefs, (b) attitudes, and (c) social behaviors. Each of these categories can be viewed as a reaction that the pupil learns in school. The second major category classifies the outcomes on the basis of the object

toward which the reaction is directed. This dimension consists of the following three subcategories: (a) reactions toward self, (b) reactions toward others, and (c) reactions toward objects.

The basic differences among social outcomes lie in the first major category (i.e., type of reaction). Distinguishing beliefs, attitudes, and behaviors reflect Allport's (1937/1968) definition of social reactions, and such distinctions have been recognized by a number of other social psychologists (e.g., Bem, 1970; Fishbein, 1967). Beliefs consist of the cognitive knowledge the individual has about his/her world or hypotheses the individual possesses concerning "the nature of the object and its relations to other objects" (Fishbein, 1967, p. 259). Attitudes are defined as evaluations on a negative-positive dimension of abstract or concrete objects or propositions. This definition of attitudes corresponds to that of many psychologists who regard evaluation or affect as the single defining dimension of attitudes (e.g., Katz & Stotland, 1959; Rosenberg, 1956; Thurstone, 1928). Finally, social behaviors are observable patterns of reactions which are carried out as a result of the influence of others.

The main reason for retaining these distinctions and studying all three types of reactions is based on the evidence that beliefs, attitudes, and behaviors are not necessarily correlated (e.g., Fishbein, 1967; Kiesler, Collins, & Miller, 1969). An example of a lack of correlation among the three subcategories would be a child who believes that his teacher is lazy and unfair, but warm and nice; the attitude of the child toward this teacher is neutral (he neither likes nor dislikes him); and behaviorally, the child smiles at the teacher, approaches the teacher, and initiates informal interactions. In another situation, it is possible that the child believes that he is independent while behaving very dependently and having negative attitudes toward dependency. Thus, it is possible to assume that an individual may have beliefs and attitudes which are inconsistent with his behavior.

In addition, the existence of one type of outcome does not necessarily indicate the existence of another type of outcome. Individuals may have beliefs about certain objects without forming attitudes about them, or individuals may have attitudes about other people without ever interacting with them. Thus, for example, a child may have beliefs about the planet Mars without ever evaluating it, or he may dislike Eskimos without ever having seen one of them.

It should be noted, however, that an individual's beliefs, attitudes, and behaviors may be interrelated (see Kiesler, Collins, & Miller, 1969). Thus, for example, a child may believe that his teacher is unfair, lazy, and cold; the child may dislike his teacher; and the child may behave toward his teacher with much arrogance and hatred. It is also possible that the set of beliefs a person forms may influence his attitudes (Fishbein, 1967) and behavior (Bem, 1970). It has been also suggested, on the basis of cognitive consistency theories, that an individual's attitudes may cause a change in his beliefs (Zajonc, 1968). Finally, much has been written about the relation between attitudes and behaviors. In spite of inconsistent findings, it is possible to state that under certain circumstances, attitudes may change behaviors (Kiesler, Collins, & Miller, 1969); and recently it was even suggested that behavior change may cause attitude change (Bem, 1970; Festinger, 1957).

Classifying social outcomes on the basis of the object of the reaction (the second major category) is based on the assumption that individuals differ in their reactions toward self, others, and objects. These are three separable reactions which are not necessarily related.

Discussion of the Categories

Beliefs. Beliefs are based on perceptions and facts-oriented information. One of the explicit goals of school education is to provide information. In school, the child acquires factual information about many

different, previously unfamiliar subjects. On the basis of the acquired information, the child forms beliefs about new subjects as war, patriotism, democracy, and so on. This new information may also modify the child's previously formed beliefs. For example, the child may change his beliefs about his parents, religion, or ethnic group as a result of the newly acquired information. In addition, his formal and informal interactions with teachers and peers may also affect his beliefs about his school, his neighborhood, and himself.

Beliefs are usually measured by self-report questionnaires or interviews. It is possible to present open-ended questions or closed questions which consist of alternatives from which the child can choose. A study by DeCharms (1972) is an example of how instruction can affect students' beliefs concerning self-determination, personal responsibility, self-confidence, internal control, and so on. In his study, part of the students received special training to change the previously mentioned beliefs, while others did not. The training lasted between one and two years. At the end of this period, the results indicated that the students who participated in the training changed their beliefs about themselves.

Attitudes. Attitudes involve an object toward which the child has positive, neutral, or negative affections. Thus, in contrast to beliefs which consist of knowledge of the object, attitudes consist of evaluations of the object in positive or negative terms.

Many attitudes are learned in school. The teacher actively engages in the evaluation of much of the information presented during the teaching process, and children may acquire these attitudes from her/him. School experiences may affect the formation of the child's attitudes toward the school, teachers, learning, a particular subject matter, or other children. The school experience may also change some of the attitudes formed before coming to a school.

Attitudes are mostly assessed by scales composed of items that rely on the respondent's self-report of feelings or evaluations regarding the particular attitude object (Scott, 1968). An example of how the schooling process affects students' social reactions is a study done by Minuchin, Biber, Shapiro, and Zimiles (1969). Among several social reactions, the researchers compared the attitudes toward the school of students from traditional schools with students from modern schools (the schools were matched on the basis of their socioeconomic-cultural level). The results indicated that "the greatest negativism and ambivalence appeared among the traditional school children, and the greatest enthusiasm and positive identification among modern school children" (p. 263).

Social behaviors. The school experience may shape the child's social behaviors. In school, the child acquires new patterns of behavior and changes some old ones. For example, schooling may affect such behaviors as aggression, self-initiation, independence, or cooperation.

Social behaviors are assessed by observational techniques (Weick, 1968). Thus, for example, Thompson (1944) compared two groups of nursery school children for a number of social behaviors. The two groups were otherwise matched; in one, the teacher was instructed to minimize her involvement and to deemphasize personal involvement relations; in the second, the teacher was instructed to actively guide children's activities and to develop warm relations with each child. Observation indicated that while at the beginning of the year the two groups did not differ in their social behavior, at the end of the year the groups differed significantly on a number of measures. Children in the second group were more ascendant, more constructive, and showed greater social participation in group activities and more leadership than children in the first group.

Reactions toward self. Reactions toward self consist of those beliefs, attitudes, or behaviors concerned with or directed toward the self.

The experience of being in school influences the child's reaction toward himself. The reactions toward self consist, for example, of the child's perceptions, feelings, and evaluations of himself as an individual and of self-directed behaviors. The school, as a primary setting for academic and social experience, influences the child's self-development. Thus, for example, psychologists have consistently documented significant relationships among such variables as academic achievement, school satisfaction, self-concept of ability, and self-esteem (e.g., Purkey, 1970).

Reactions toward others. Reactions toward others consist of those beliefs, attitudes, or behaviors concerned with or directed toward other individuals and/or groups. School experience influences the type of reactions that the person has toward other individuals. The child may form beliefs and attitudes about peers, teachers, or other adults. In addition, the child acquires some patterns of social behavioral reactions toward other individuals or groups.

Reactions toward objects. Reactions toward objects consist of those beliefs attitudes, or behaviors concerned with or directed toward concrete and/or abstract objects and/or propositions. The school experience shapes the child's reaction toward different objects. It can be a touchable object, a symbol, a slogan, or an idea. Thus, for example, the schooling process may affect the child's attitudes toward democracy or nationalism, beliefs about government actions, and patterns of political behavior.

The Use of the Taxonomy

The proposed taxonomy can be seen as a framework for conceptually organizing studies of social outcomes of the schooling process, especially in light of the fact that the proposed taxonomy enables the classification of any possible social outcome into systematically differentiated categories. For example, according to the taxonomy, the

social outcome of independence can be measured in several ways. Thus, a child's belief concerning his independence can be measured by asking if he likes to be independent, and the child's behavior of independence can be assessed by observing his behavior. In addition, we can measure the child's belief concerning others by asking him to indicate whether his peers are independent. We can also measure his attitudes toward others by asking him if he likes the independence of other individuals. These examples show that the proposed taxonomy of social outcomes may facilitate research by indicating the specificity of the measured child's reaction through the distinction among the child's beliefs, attitudes, and behaviors. Thus, on the one hand, the taxonomy characterizes the uniqueness of each social outcome; on the other hand, it enables the study of the relationships among different social outcomes. The latter possibility calls for investigating the extent of the interrelation among children's beliefs, attitudes, and behavior that were learned in school. In addition, it is possible to investigate the effect of one type of outcome on another. The focus of such research could be, for example, on the investigation of how children's beliefs formed in a school affect their previous attitudes, or how the attitudes modified or formed as a result of school experience influence their behavior. All the above discussed features of the proposed taxonomy suggest that it can serve as a framework for conceptualizing research in the social outcomes of the schooling process.

The usefulness of the taxonomy can be demonstrated if two conditions are fulfilled. First, it must be shown that the social reactions, as classified by the taxonomy, may be affected by the schooling process. This condition was shown to be fulfilled through the review of a number of studies which showed that variation in schooling processes leads to differing social outcomes. Second, it must be shown that a large number of social reactions can be classified according to the categories of the proposed taxonomy.

Examination of the Taxonomy

To examine the classification utility of the proposed taxonomy, a variety of children's social reactions were classified according to the categories of the taxonomy. These social reactions were isolated from a review of several dozen studies in the area of education and child social development. All of the reviewed studies focused on socio-psychological variables, and although none of the studies investigated social outcomes per se, it was assumed that these variables could be utilized in research on social outcomes of the schooling process.

The reviewed studies do no represent any systematic sample of social development studies. These studies were chosen merely as demonstrative examples of how to use the proposed taxonomy.

The classification of the variables was done on the basis of the operationalization of these variables (see Table 1). That is, it was necessary to find out how the researcher operationalized the variable to classify it, because the same variable can be operationalized as a belief, an attitude, or a social behavior.

In order to provide examples of how the researchers operationalize social variables, several studies will be discussed at greater length. Thus, an experiment by Underwood, Moore, and Rosenhan (1973) can serve as an example of a study which measured social behavior toward self. The dependent variable in this study was self-gratification. To measure this variable, children were given the opportunity to gratify themselves by taking as much money as they wanted. A study by Kagan and Madsen (1971) is an example of an experiment which measured social behavior toward others. This study investigated competitive and cooperative patterns of behavior. Cooperative or competitive behavior was assessed by organizing a play in which two children were required to reach a goal. The game could be played competitively, in which case a child could try

Table 1

Classification of Social Variables According to the Categories of the Taxonomy

Type of Outcome / Object of Reaction	Beliefs	Attitudes	Behaviors
Toward Self	Yarrow, Scott, & Waxler (1973) — altruism Trowbridge (1972) — self-concept Soares & Soares (1969) — self-perception Shantz & Woydanoff (1973) — aggression	Schmuck (1963) — attitude toward self Feshbach & Feshbach (1969) — empathy	Fagot & Patterson (1969) — sex role Underwood, Moore, & Rosenhan (1973) — self-gratification Constanzo & Shaw (1966) — conformity Weinheimer (1972) — conformity
Toward Others	Yee & Runkel (1969) — attitudes toward teacher Rothenberg (1970) — social sensitivity Koslin, Koslin, Pargament, & Waxman (1972) — racial attitudes Adelson, Green, & O'Neil (1969) — political attitudes Ehman (1969) — political attitudes Hudgins, Smith, & Johnson (1962) — perception of classmates Yarrow, Scott, & Waxler (1973) — altruism Feshbach & Feshbach (1969) — aggression Lesser (1959) — aggression Ross (1966) — dependence Boehm (1957) — independence Durkin (1959) — moral development Hoffman (1971) — moral development Luria & Rebelsky (1969) — moral development	Yee & Runkel (1969) — attitudes toward teacher Schmuck (1963) — involvement in class Hartup (1964) — friendship Hudgins, Smith, & Johnson (1962) — perception of classmates Lesser (1959) — popularity Insel & Wilson (1971) — conservatism Koslin, Koslin, Pargament, & Waxman (1972) — racial attitudes	Kagan & Madsen (1971) — cooperation Hartup (1958) — dependence Heathers (1955) — dependence Ross (1966) — dependence McCandless, Bilous, & Bennett (1961) — popularity and dependence Walters, Pearce, & Dahms (1961) — aggression Bryan (1971) — altruism Grusec (1971) — altruism Masters (1972) — altruism Presbie & Coiteux (1971) — altruism Staub (1971) — altruism
Toward Objects	Epstein & Komorita (1971) — locus of control Bernett & Zucker (1973) — friendliness Zytkoskee, Strickland, & Watson (1971) — delay gratification Ehman (1969) — political attitudes	Schmuck (1963) — attitudes toward school Insel & Wilson (1971) — conservatism Spencer & Horowitz (1973) — racial attitudes	Jegard & Walters (1960) — aggression Crandall, Preston, & Rabson (1960) — achievement behavior

to receive the reward himself, or cooperatively, in which case the two children could help each other and share the reward. The experimenters observed the playing of the game and thus were able to determine the nature of the behavior.

An example of a study which investigated attitudes and beliefs toward others is one by Yee and Runkel (1969). The researchers used a 100-item inventory, "About My Teacher" (AMT), developed by Beck (1964) to investigate pupils' attitudes toward teachers. The questionnaire consists of attitudinal and belief items such as "Is your teacher fun to be with?"; "Does your teacher succeed in keeping the pupils under control?"; and "Does your teacher make you feel like learning a lot on your own?". Soares and Soares (1969) measured the self-beliefs of children. Self-beliefs were measured by asking the children to rate themselves on 20 pairs of bi-polar traits. A study by Hudgins, Smith, and Johnson (1962) investigated attitudes and beliefs toward others. Children were given four sociometric tests and were asked to indicate three or four pupils who generally were the best students, three or four pupils with whom the child would like to work on arithmetic problems, and three or four pupils who were most liked. In addition, the children were asked the same questions with regard to pupils who have the least ability and are least liked. Finally, a study by Insel and Wilson (1971) measured attitudes toward other people and objects. The authors devised a Conservation Scale for children. The scale consists of 50 items to which the children were asked to indicate if they favor or believe in the particular object or concept. Some examples of these items are computers, the Queen, Chinese food, bikinis, and so on.

Several conclusions can be drawn from the classification of the social variables according to the proposed taxonomy. First, the taxonomy appears to be a useful tool for classifying a variety of social reactions. Second, the categories of the taxonomy indicate the precise nature of the

social variable. Is it belief, attitude, or behavior? This function is important because the same variable can be measured in several different ways, and often researchers measure a variable indirectly, discussing it as if it were measured directly. Thus, for example, while Bryan (1971) measured altruism by observing the child's behavior toward others, Yarrow, Scott, and Waxler (1973) measured the same variable by asking a child questions about his beliefs concerning other people in different situations. Third, the taxonomy facilitates investigation of the relationships among the subcategories of variables. That is, it is possible to investigate the relationships between different reactions. For example, it is possible to compare a child's beliefs concerning the teacher with his attitudes toward the teacher. Thus, it appears that the proposed taxonomy is useful in classifying social reactions. Such classification defines the scope of social outcomes of the schooling process and clarifies the meaning of the specific social reactions.

Summary

The present paper calls for the attention of social psychologists of education to study social outcomes of the schooling process.

A major concern of social psychologists has been the improvement of the teaching-learning process and associated activities. However, it should be remembered that a classroom is also a major source of socialization. Children not only acquire academic skills in school, but also learn social reactions which may be important for their future success in adult life. Those social reactions which are learned in the school are called social outcomes of the schooling process. In order to facilitate the investigation of social outcomes of the schooling process, the paper suggested a taxonomy which enables the classification of the social outcomes and defines their scope.

The present paper does not deal with the issues of investigating and measuring social outcomes of the schooling process. It is recognized that these issues are complex and deserve special consideration. There were offered a number of models for the investigation of the relationship between school practices and students' behavior (e.g., Cooley & Leinhardt, 1975). Further research is needed in order to validate the usefulness of the suggested models.

It is hoped that social psychologists of education will direct their efforts to investigating the beliefs, attitudes, and social behaviors that children learn in schools. Such research should function as a basis for establishing social objectives in education. Once it is determined what kind of social outcomes are learned in schools, then it might be possible to determine what kind of outcomes are desired among them. Eventually, it might be useful to structure ar environment in which the child will learn only those social outcomes which are adaptive and desired by the society. It is recognized that this is a long and complex way to achieve the above suggested goal. But, even the longest march starts with the first step.

References

Adelson, J., Green, B., & O'Neil, R. Growth of the idea of law in adolescence. Developmental Psychology, 1969, 1, 327-332.

Allport, G. H. The historical background in modern social psychology. In G. Lindzey & E. Aronson (Eds.), The handbook of social psychology. Reading, Mass.: Addison-Wesley, 1968. (Originally published, 1937.)

Amidon, E. J., & Flanders, N. A. The role of the teacher in the classroom. Minneapolis: Paul Amidon and Associates, 1963.

Backman, C. W., & Secord, P. F. A social psychological view of education. New York: Harcourt, Brace & World, 1968.

Bany, N., & Johnson, L. Classroom group behavior. New York: Macmillan, 1964.

Barnett, D. W., & Zucker, K. B. An exploration into children's interpersonal behavior as related to their perception of social interactions. Psychology in the Schools, 1973, 10, 61-66.

Beck W. H. Pupil's perceptions of teacher merit: A factor analysis of five hypothesized dimensions. Unpublished doctoral disseration, Stanford University, 1964.

Bem, D. J. Beliefs, attitudes and human affairs. Belmont, Calif.: Brooks/Cole, 1970.

Biddle, B. J., Rosencranz, H. A., & Rankin, E. F. Studies in the role of the public school teacher. Columbia: University of Missouri, Social Psychological Laboratory, 1961.

Bidwell, C. E. The school as a formal organization. In L. G. March (Ed.), Handbook of organizations. Chicago: Rand McNally, 1965.

Boehm, L. The development of independence: A comparative study. Child Development, 1957, 28, 85-92.

Brophy, J. E., & Good, T. L. Teacher-student relationships: Causes and consequences. New York: Holt, Rinehart & Winston, 1974.

Bryan, J. H. Model affect and children's imitative altruism. Child Development, 1971, 42, 2061-2065.

Charters, W. W., & Gage, N. L. (Eds.). Readings in the social psychology of education. Boston: Allyn & Bacon, 1963.

Constanzo, P. R., & Shaw, M. E. Conformity as a function of age level. Child Development, 1966, 37, 967-975.

Cooley, W. W., & Leinhardt, G. The application of a model for investigating classroom processes. Pittsburgh: University of Pittsburgh, Learning Research and Development Center, 1975. (LRDC Publication 1975/24)

Crandall, V. J., Preston, A., & Rabson, A. Maternal reactions and the development of independence and achievement behavior in young children. Child Development, 1960, 31, 243-251.

DeCharms, R. Personal causation training in the schools. Journal of Applied Social Psychology, 1972, 2, 95-113.

Durkin, D. Children's acceptance of reciprocity as a justice principle. Child Development, 1959, 30, 289-296.

Ehman, L. H. An analysis of the relationship of selected educational variables with the political socialization of high school students. American Educational Research Journal, 1969, 6, 559-590.

Epstein, R., & Komorita, S. S. Self-esteem, success, failure, and locus of control in Negro children. Developmental Psychology, 1971, 4, 2-8.

Fagot, B. I., & Patterson, G. R. An in vivo analysis of reinforcing contingencies for sex-role behaviors in the preschool child. Developmental Psychology, 1969, 1, 563-568.

Feshbach, N. D., & Feshbach, S. The relationship between empathy and aggression on two age groups. Developmental Psychology, 1969, 1, 102-107.

Festinger, L. A theory of cognitive dissonance. Evanston, Ill.: Row-Peterson, 1957.

Fishbein, M. A consideration of beliefs, and their role in attitude measurement. New York: John Wiley & Sons, 1967.

Getzels, J. W. Conflict and role behavior in the educational setting. In W. W. Charters, Jr., & N. L. Gage (Eds.), Readings in the social psychology of education. Boston: Allyn & Bacon, 1963.

Grusec, J. E. Power and the internalization of self-denial. Child Development, 1971, 42, 93-105.

Guskin, A. E., & Guskin, S. L. A social psychology of education. Reading, Mass.: Addison-Wesley, 1970.

Hartup, W. W. Nurturance and nurturance-withdrawal in relation to the dependency behavior of preschool children. Child Development, 1958, 29, 191-201.

Hartup, W. W. Dependence and independence. The Sixty-second Yearbook of the National Society for the Study of Education (Pt. 1), 1963, 62 333-363.

Hartup, W. W. Friendship status and the effectiveness of peers as reinforcing agents. Journal of Experimental Child Psychology, 1964, 1, 154-162.

Havighurst, R. Human development and education. New York: Longmans, Green & Company, 1953.

Heathers, G. Emotional dependence and independence in nursery-school play. Journal of Genetic Psychology, 1955, 87, 37-58.

Himmelweit, H. T., & Swift, B. A model for the understanding of school as a socializing agent. In P. H. Mussen, J. Langer, & M. Covington (Eds.), Trends and issues in developmental psychology. New York: Holt, Rinehart & Winston, 1969.

Hoepfner, R., Henenway, J., DeMuth, J., Tenopyr, M. L., Granville, A. C., Petrosko, J. M., Krakower, J., Silberstein, R., & Nadeau, M. A. CSE-RBS test evaluations: Tests of higher-order cognitive, affective, and interpersonal skills. Los Angeles: Center for the Study of Evaluation, 1972.

Hoffman, M. L. Identification and conscience development. Child Development, 1971, 42, 1071-1082.

Hudgins, B. B., Smith, L. M., & Johnson, J. J. The child's perception of his classmates. Journal of Genetic Psychology, 1962, 101, 401-405.

Insel, P., & Wilson, G. D. Measuring social attitudes in children. The British Journal of Social and Clinical Psychology, 1971, 10, 84-86.

Jackson, P. W. Life in classrooms. New York: Holt, Rinehart & Winston, 1968.

Jegard, S., & Walters, R. H. A study of some determinants of aggression in young children. Child Development, 1960, 31, 739-747.

Johnson, D. W. The social psychology of education. New York: Holt, Rinehart & Winston, 1970.

Kagan, S., & Madsen, M. C. Cooperation and competition of Mexican, Mexican-American, and Anglo-American children of two ages under four instructional sets. Developmental Psychology, 1971, 5, 32-39.

Katz, D., & Stotland, E. A. A preliminary statement to a theory of attitude structure and change. In S. Koch (Ed.), Psychology: A study of a science (Vol. 3). New York: McGraw-Hill, 1959.

Kiesler, C. A., Collins, B. E., & Miller, N. Attitude change: A critical analysis of theoretical approaches. New York: John Wiley & Sons, 1969.

Koslin, S., Koslin, B., Pargament, R., & Waxman, H. Classroom racial balance and students' interracial attitudes. Sociology of Education, 1972, 45, 386-407.

Lesser, G. S. The relationships between various forms of aggression and popularity among lower-class children. Journal of Educational Psychology, 1959, 50, 20-25.

Luria, Z., & Rebelsky, F. Children's conceptions of events before and after confession of transgression. Child Development, 1969, 40, 1055-1061.

Masters, J. C. Effects of social comparison upon the imitation of neutral and altruistic behaviors by young children. Child Development, 1972, 43, 131-142.

McCandless, B. R., Bilous, C. B., & Bennett, H. L. Peer popularity and dependence on adults in preschool-age socialization. Child Development, 1961, 32, 511-518.

Miles, M. W., & Charters, W. W. (Eds.). Learning in social settings: New readings in the social psychology of education. Boston: Allyn & Bacon, 1970.

Minuchin, P., Biber, B., Shapiro, E., & Zimiles, H. The psychological impact of school experience. New York: Basic Books, 1969.

Mischel, W. Personality and assessment. New York: Wiley, 1968.

Mischel, W. Introduction to personality. New York: Holt, Rinehart & Winston, 1971.

Mischel, W. Toward a cognitive social learning reconceptualization of personality. Psychological Review, 1973, 80, 252-283.

Parsons, T. The school class as a social system: Some of its functions in American society. Harvard Educational Review, 1959, 29, 297-318.

Presbie, R. J., & Coiteux, P. F. Learning to be generous or stingy: Imitation of sharing behavior as a function of model generosity and vicarious reinforcement. Child Development, 1971, 42, 1033-1038.

Purkey, W. W. Self-concept and school achievement. Englewood Cliffs, N. J.: Prentice-Hall, 1970.

Rosenberg, M. Cognitive structure and attitudinal effect. Journal of Abnormal and Social Psychology, 1956, 53, 367-372.

Rosenthal, R., & Jacboson, L. Pygmalion in the classroom. New York: Holt, Rinehart & Winston, 1968.

Ross, D. Relationship between dependency, international learning, and incidental learning in preschool children. Journal of Personality and Social Psychology, 1966, 4, 374-381.

Rothenberg, B. B. Children's social sensitivity and the relationship to interpersonal competence, intrapersonal comfort, and intellectual level. Developmental Psychology, 1970, 2, 335-350.

Schmuck, R. A. Some relationship of peer liking patterns in the classroom to pupil attitudes and achievement. The School Review, 1963, 71, 337-359.

Schmuck, R. A., & Miles, M. B. Organization development in schools. Palo Alto, Cal.: National Press, 1971.

Schmuck, R. A., & Schmuck, P. A. Group processes in the classroom. Dubuque, Iowa: William C. Brown, 1971.

Scott, W. A. Attitude measurement. In G. Lindzey & E. Aronson (Eds.), The handbook of social psychology. Reading, Mass.: Addison-Wesley, 1968.

Shantz, D. W., & Woydanoff, D. A. Situational effects on retaliatory aggression at three age levels. Child Development, 1973, 44, 149-153.

Soares, A. T., & Soares, L. M. Self-perceptions of culturally disadvantaged children. American Educational Research Journal, 1969, 6, 31-45.

Spencer, M. B., & Horowitz, F. D. Effects of systematic social and token reinforcement on the modification of racial and color concept attitudes in Black and in White preschool children. Developmental Psychology, 1973, 9, 246-254.

Staub, E. The use of role playing and induction in children's learning of helping and sharing behavior. Child Development, 1971, 42, 805-816.

Thompson, G. S. The social and emotional development of preschool children under two types of educational program. Psychological Monographs, 1944, 58(5, Whole No. 258).

Thurstone, L. L. Attitudes can be measured. American Journal of Sociology, 1928, 33, 529-554.

Trow, W. C., Zander, A. F., Morse, W. C., & Jenkins, D. H. Psychology of group behavior: The class as a group. Journal of Educational Psychology, 1950, 41, 322-338.

Trowbridge, N. Self-concept and socio-economic status in elementary school children. American Educational Research Journal, 1972, 9, 525-537.

Underwood, B., Moore, B. S., & Rosenhan, D. L. Affect and self-gratification. Developmental Psychology, 1973, 8, 209-214.

Walker, D. K. Socio-emotional measures for preschool and kindergarten children. San Francisco: Jossey-Bass, 1973.

Walters, J., Pearce, D., & Dahms, L. Affectional and aggressive behavior of preschool children. Child Development, 1957, 28, 15-26.

Weick, K. E. Systematic observational methods. In G. Lindzey & E. Aronson (Eds.), The handbook of social psychology. Reading, Mass.: Addison-Wesley, 1968.

Weinheimer, S. Egocentrism and social influence in children. Child Development, 1972, 43, 567-578.

Yarrow, M. R., Scott, P. M., & Waxler, C. Z. Learning concern for others. Developmental Psychology, 1973, 8, 240-260.

Yee, A. H. (Ed.). Social interaction in educational settings. Englewood Cliffs, N. J.: Prentice-Hall, 1971.

Yee, A. H., & Runkel, P. J. Simplicial structures of middle-class and lower-class pupils' attitudes toward teachers. Developmental Psychology, 1969, 1, 646-652.

Zajonc, R. B. Cognitive theories in social psychology. In G. Lindzey & E. Aronson (Eds.), The handbook of social psychology. Reading, Mass.: Addison-Wesley, 1968.

Zytkoskee, A., Strickland, B. R., & Watson, J. Delay of gratification and internal versus external control among adolescents of low socioeconomic status. Developmental Psychology, 1971, 4, 93-98.